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Sommario/riassunto	This book introduces to the reader an analytical procedure to characterize the organic-rich Indian Gondwana shale in terms of its elastic, petrophysical, geochemical, and microstructural properties using state-of-the-art laboratory measurements and accounting for the elastic anisotropy, pore microstructure along with rock physics models, image segmentation techniques, and pore network models. As compared to sandstone, shale possesses a more complex origin, strong heterogeneity, and is anisotropic in nature. This makes the characterization of shale rock and the assessment of the potential of the reservoir extremely challenging. The laboratory-measured properties of the reservoir rock are important for the evaluation of the potential of the reservoir rock. These input parameters are utilized to predict variables, build a petrophysical model, and set up strategies in

several domains of petroleum engineering and petrophysics. The authors presented the case studies for the identification of prospective shale formation zones in the Indian Gondwana basin that might be used for commercial gas and/or oil production. The scope of this book covers the interest of all researchers and academicians involved in source-rock characterization at the laboratory scale. Furthermore, the source-rock evaluation methods and their many nuances covered here provide excellent reading for geoscience graduates.
